UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,676	05/26/2006	Andreas Johannes Gerrits	NL 031414	5419

24737 7590 06/18/2009

PHILIPS INTELLECTUAL PROPERTY & STANDARDS
P.O. BOX 3001
BRIARCLIFF MANOR, NY 10510

EXAMINER	
ALBERTALLI, BRIAN LOUIS	

ART UNIT	PAPER NUMBER
2626	

MAIL DATE	DELIVERY MODE
06/18/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/580,676	Applicant(s) GERRITS ET AL.	
	Examiner BRIAN L. ALBERTALLI	Art Unit 2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5-8,10,11 and 18-22* is/are rejected.

7)☒ Claim(s) *4,9 and 12-17* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 21 and 22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 21 is directed to an “audio stream”. An audio stream is not a statutory category of invention. That is, an audio stream is clearly not a machine, manufacture, or composition of matter. Further, an audio stream is not a process, because it does not define a series of "acts" to be performed. Rather, the claimed audio stream is simply a collection of parameters used to represent an audio signal.

Claim 22 is directed to a storage medium onto which the audio stream of claim 21 is stored. This amounts non-functional descriptive material. That is, since the audio stream is a collection of parameters used to represent an audio signal, a storage medium storing these parameters would not provide the requisite functionality to satisfy the practical application requirement (see MPEP 2106.01). In contrast, functional descriptive material defines structural and functional interrelationships between a computer program and other claimed elements of a computer, which permit the computer program's functionality to be realized.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 6, 10, and 18-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Lindemann (U.S. Patent 6,298,322).

In regard to claim 1, Lindemann discloses a method of encoding an audio signal (x) (audio signal, column 7, lines 1-2), the method comprising, for each of a plurality of segments of the signal, the steps of:

analysing (TSA) the sampled signal values to provide one or more sinusoidal codes (Cs) corresponding to respective sinusoidal components of the audio signal (sinusoid components are identified in the input audio signal, column 7, lines 1-15);

subtracting a signal corresponding to said sinusoidal components from said audio signal to provide a first residual signal (r1) (the sinusoid components are removed from the signal to produce a residual signal, column 7, lines 15-17; by subtracting the resynthesized sinusoid components, column 10, lines 9-16);

modeling (SE) the frequency spectrum of the first residual signal (r1) by determining first filter parameters (Ps) of a filter which has a frequency response approximating a frequency spectrum of the first residual signal (LPC filter coefficients are determined for encoding the residual signal, column 16, lines 62-66 and column 17, lines 10-24);

subtracting a signal corresponding to said first filter parameters from the first residual signal to provide a second residual signal (r2) (the residual signal is inverse filtered by the LPC filter coefficients (equivalent to subtracting the filter parameters) to produce an excitation signal, column 17, lines 29-33);

modeling (RPE) a component (r2, r3) of the second residual signal with a pulse train coder (RPE) to provide respective pulse train parameters (L0) (the excitation signal is coded as an amplitude sequence, i.e. pulse train coded, column 17, lines 34-39); and

generating (15) an encoded audio stream (AS) including said sinusoidal codes (Cs), said first filter parameters (Ps) and said pulse train parameters (L0) (the encoded audio stream sent to communications channel 103 includes sinusoid parameter sequence, column 7, lines 9-13; the LPC filter parameters, column 17, lines 51-54; and the pulse train amplitude sequence of the excitation signal, column 17, lines 34-39 and column 18, lines 9-16).

In regard to claim 6, Lindemann discloses said first filter parameters (Ps) comprise one of: Laguerre or Linear Prediction filter parameters (LPC filter parameters, column 16, lines 62-66 and column 17, lines 10-24).

In regard to claim 10, Lindemann disclose a method of decoding an audio stream, the method comprising the steps of:

reading (DeM) an encoded audio stream (AS') including, for each of a plurality of segments of an audio signal: sinusoidal codes (CS) (sinusoid parameters are read from

an encoded communication stream, column 18, lines 45-49), pulse train parameters (L0) (a pulse-train excitation segment, column 23, lines 10-12), and first filter parameters (Ps) (LPC coefficients, column 22, line 59 to column 23, line 5); and

employing (SiS) said sinusoidal codes to synthesize respective sinusoidal components of the audio signal (a sinusoidal oscillator bank generates sinusoidal components of the signal, column 18, lines 50-60);

employing (PTG) said pulse train parameters (L0) to generate an excitation signal (an excitation segment is generated from a pulse-train, column 23, lines 8-12);

imposing (SEG) a spectral envelope according to said first filter parameters (Ps) on a first signal (r2') a component of which comprises said excitation signal (the excitation signal is filtered by an all pole filter generated by the received LPC coefficients, column 23, lines 45-47), and

adding said synthesized sinusoidal components and said spectrally filtered signal to produce a synthesized audio signal (x) (see Fig. 1, the generated sinusoid signal and generated excitation signal are summed 107 to form the final audio output, column 7, lines 31-35).

In regard to claim 18, Lindemann et al. disclose an audio coder (Fig. 1) arranged to process a respective set of sampled signal values for each of a plurality of sequential segments of an audio signal (x) (audio signal, column 7, lines 1-2), said coder comprising:

an analyser (TSA) arranged to analyse the sampled signal values to provide one or more sinusoidal codes (Cs) corresponding to respective sinusoidal components of the audio signal (sinusoid components are identified in the input audio signal, column 7, lines 1-15);

a subtractor arranged to subtract a signal corresponding to said sinusoidal components from said audio signal to provide a first residual signal (r1) (the sinusoid components are removed from the signal to produce a residual signal, column 7, lines 15-17; by subtracting the resynthesized sinusoid components, column 10, lines 9-16);

a modeller (SEG) arranged to model the frequency spectrum of the first residual signal (r1) by determining first filter parameters (Ps) of a filter which has a frequency response approximating a frequency spectrum of the first residual signal (LPC filter coefficients are determined for encoding the residual signal, column 16, lines 62-66 and column 17, lines 10-24);

a subtractor arranged to subtract a signal corresponding to said first filter parameters from the first residual signal to provide a second residual signal (r2) (the residual signal is inverse filtered by the LPC filter coefficients (equivalent to subtracting the filter parameters) to produce an excitation signal, column 17, lines 29-33);

a modeller (RPE) arranged to model a component (r2,r3) of the second residual signal with a pulse train coder (RPE) to provide respective pulse train parameters (L0) (the excitation signal is coded as an amplitude sequence, i.e. pulse train coded, column 17, lines 34-39); and

a bit stream generator (15) for generating an encoded audio stream (AS) including said sinusoidal codes (Cs), said first filter parameters (Ps) and said pulse train parameters (L0) (the encoded audio stream sent to communications channel 103 includes sinusoid parameter sequence, column 7, lines 9-13; the LPC filter parameters, column 17, lines 51-54; and the pulse train amplitude sequence of the excitation signal, column 17, lines 34-39 and column 18, lines 9-16).

In regard to claim 19, Lindemann discloses an audio player (Fig. 1), comprising:

means for reading (DeM) an encoded audio stream (AS') including, for each of a plurality of segments of an audio signal: sinusoidal codes (CS) (sinusoid parameters are read from an encoded communication stream, column 18, lines 45-49), pulse train parameters (L0) (a pulse-train excitation segment, column 23, lines 10-12), and first filter parameters (Ps) (LPC coefficients, column 22, line 59 to column 23, line 5); and

a synthesizer (SiS) arranged to employ said sinusoidal codes to synthesize respective sinusoidal components of the audio signal (a sinusoidal oscillator bank generates sinusoidal components of the signal, column 18, lines 50-60);

means (PTG) for generating an excitation signal from said pulse train parameters (L0) (an excitation segment is generated from a pulse-train, column 23, lines 8-12);

means for imposing (SEG) a spectral envelope according to said first filter parameters (Ps) on a first signal (r2') a component of which comprises said excitation signal (the excitation signal is filtered by an all pole filter generated by the received LPC coefficients, column 23, lines 45-47), and

an adder for adding said synthesized sinusoidal components and said spectrally filtered signal to produce a synthesized audio signal (x) (see Fig. 1, the generated sinusoid signal and generated excitation signal are summed 107 to form the final audio output, column 7, lines 31-35).

In regard to claim 20, Lindemann discloses an audio system comprising an audio coder as claimed in claim 18 (Fig. 1, audio signal encoder and synthesizer, column 6, lines 61-67).

In regard to claim 21, Lindemann discloses an audio stream (AS) (see Fig. 1, audio signal stored by block 103, column 6, lines 61-67) comprising sinusoidal codes (Cs) corresponding to respective sinusoidal components of an audio signal (x) (sinusoid components identified in the input audio signal, column 7, lines 1-15); first filter parameters (Ps) for a filter which has a frequency response approximating a frequency spectrum of a first residual signal (LPC filter coefficients are determined for encoding the residual signal, column 16, lines 62-66 and column 17, lines 10-24), said first residual signal corresponding to said audio signal with a signal corresponding to said sinusoidal components subtracted (the sinusoid components are removed from the signal to produce a residual signal, column 7, lines 15-17; by subtracting the resynthesized sinusoid components, column 10, lines 9-16); and pulse train parameters (L0) modelled from a component (r2,r3) of a second residual signal, said second residual signal corresponding to first residual signal with a signal corresponding to said

first filter parameters subtracted (the excitation signal is coded as an amplitude sequence, i.e. pulse train coded, column 17, lines 34-39; the residual signal is inverse filtered by the LPC filter coefficients (equivalent to subtracting the filter parameters) to produce an excitation signal, column 17, lines 29-33).

In regard to claim 22, Lindemann discloses a storage medium on which an audio stream (AS) as claimed in claim 21 has been stored (Fig. 1, storage 103, column 6, lines 61-67).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 2, 3, 7, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lindemann, in view of Applicant's Admitted Prior Art (AAPA).

In regard to claim 2, Lindemann et al. disclose a parametric audio coding method, but to not disclose modeling the temporal envelope of the second residual signal and providing a third residual signal.

AAPA discloses the steps of:

modelling (TE) the temporal envelope of each second residual signal by determining second parameters (Pt) (Fig. 2(a), a set of parameters Pt describing the

temporal envelope of the residual r2 is determined, Specification, page 2, lines 18-23), and

providing a third residual signal (r3) by removing from the second residual signal the temporal envelope corresponding to said second parameters (a temporally flatted residual r3 is output, Specification, page 2, lines 18-23);

wherein said generating step includes said second parameters in said encoded audio stream (AS) (the set of parameters Pt are included in the output as part of the conventional type noise codes, Specification, page 6, lines 8-16).

Thus, Lindemann differs from the claimed invention by the simple substitution of a noise encoder including a temporal envelope modeler (TE) of the AAPA for the noise encoder including only the spectral envelope modeler of Lindemann. One of ordinary skill in the art at the time of invention could have replaced noise encoder of Lindemann with the noise encoder of the AAPA and output the resulting residual (r3) for pulse train coding as described by Lindemann. The result would have predictably provided a pulse train coded third residual signal (r3) which would represent the temporal envelope of the residual signal (r2). Furthermore, the resulting substitution would result in said component of the second residual signal (i.e. the component that was pulse train coded) comprising the third residual signal (r3).

Thus, it would have been obvious to one of ordinary skill in the art at the time of invention to substitute the noise encoder of the AAPA for the noise encoder of Lindemann and provide the residual signal (r3) to the pulse train coder of Lindemann,

because one of ordinary skill in the art would have been able to carry out such a substitution, and the results would be reasonably predictable.

In regard to claim 3, Lindemann discloses said component of each second residual signal (i.e. the component that is modeled by the pulse train coder) comprises said second residual signal (r2) (excitation signal is coded as an amplitude sequence, i.e. pulse train coded, column 17, lines 34-39); and

wherein said generating step includes parameters in said encoded audio stream (AS) (the encoded audio stream sent to communications channel 103 includes the pulse train amplitude sequence of the excitation signal, column 17, lines 34-39 and column 18, lines 9-16).

Lindemann does not disclose modeling (TEG) the temporal envelope of the second residual signal by determining second parameters (Pt).

AAPA discloses the steps of:

modelling (TE) the temporal envelope of the second residual signal by determining second parameters (P t) (Fig. 2(a), a set of parameters Pt describing the temporal envelope of the residual r2 is determined, Specification, page 2, lines 18-23).

Thus, Lindemann differs from the claimed invention by the simple substitution of noise encoder including a temporal envelope modeler (TE) of the AAPA for the noise encoder including only the spectral envelope modeler of Lindemann. One of ordinary skill in the art at the time of invention could have replaced noise encoder of Lindemann with the noise encoder of the AAPA and the result would have predictably provided a

pulse train coded third residual signal (r3) which would represent the temporal envelope of the residual signal (r2). Furthermore, the resulting substitution would result in the temporal envelope parameters being included in the encoded audio stream.

Thus, it would have been obvious to one of ordinary skill in the art at the time of invention to substitute the noise encoder including temporal modeling of the AAPA for the noise encoder of Lindemann, because one of ordinary skill in the art would have been able to carry out such a substitution, and the results would be reasonably predictable.

In regard to claim 7, as noted above with respect to claim 2, Lindemann does not disclose determining second parameters (Pt).

AAPA discloses determining second parameters comprising comprise one of: Linear Prediction parameters or Line Spectral Pairs (LSP) or Line Spectral Frequencies (LSF) coefficients together with respective gains (Fig. 2(a), parameters derived from LSP's or LSF's together with a gain envelope, Specification, page 2, lines 18-23).

Thus, Lindemann differs from the claimed invention by the simple substitution of noise encoder including a temporal envelope modeler (TE) producing LSP or LSF parameters and gains of the AAPA for the noise encoder including only the spectral envelope modeler of Lindemann. One of ordinary skill in the art at the time of invention could have replaced noise encoder of Lindemann with the noise encoder of the AAPA and the result would have predictably provided second parameters comprising one of LSP or LSF coefficients together with respective gains. Furthermore, the resulting

substitution would result in the temporal LSP or LSF coefficients together with respective gains being included in the encoded audio stream.

Thus, it would have been obvious to one of ordinary skill in the art at the time of invention to substitute the noise encoder including temporal modeling of the AAPA for the noise encoder of Lindemann, because one of ordinary skill in the art would have been able to carry out such a substitution, and the results would be reasonably predictable.

In regard to claim 11, Lindemann does not disclose said encoded audio stream includes second parameters (PT), said method comprising the step of:

imposing (TEG) a temporal envelope according to said second filter parameters (PT) on a second signal (r3') a component of which comprises said excitation signal, and

wherein said first signal comprises said temporally filtered signal (r2').

AAPA discloses imposing (TEG) a temporal envelope according to said second filter parameters (PT) on a second signal (r3') a component of which comprises said excitation signal (Fig. 2(b), temporal envelope generator adds the temporal envelop on the basis of received parameters (Specification, page 2, lines 24-29), and

wherein said first signal comprises said temporally filtered signal (r2') (see Fig. 2(b), the output of TEG is the first temporally filtered signal r'2).

Thus, Lindemann differs from the claimed invention by the simple substitution of noise decoder including a temporal envelope generator (TEG) adding a temporal

envelope according to received temporal envelope parameters of the AAPA for the noise encoder including only the spectral envelope generator (SEG) of Lindemann. One of ordinary skill in the art at the time of invention could have replaced noise encoder of Lindemann with the noise encoder of the AAPA and the result would have predictably generated a temporal envelope according to received temporal envelope parameters. Furthermore, this substitution would be required to decode an encoded signal encoded with temporal envelope parameters such as that generated by the method of claim 2.

Thus, it would have been obvious to one of ordinary skill in the art at the time of invention to substitute the noise decoder including a temporal envelope generator of the AAPA for the noise decoder of Lindemann, because one of ordinary skill in the art would have been able to carry out such a substitution, and the results would be reasonably predictable.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lindemann, in view of Kroon et al. (*Regular-Pulse Excitation-A Novel Approach to Effective and Efficient Multipulse Coding of Speech*).

In regard to claim 5, Lindemann does not disclose what type of pulse train coder is used.

Kroon et al. disclose a regular pulse excitation coder (see section I).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Lindemann to use a regular pulse excitation coder, because RPE

coders provide a low complexity, toll quality residual coder, as suggested by Kroon et al. (see Abstract).

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lindmann, in view of Schuijers et al. (*Advances in Parametric Coding for High Quality Audio*).

In regard to claim 8, Lindmann does not disclose modeling transient portions of the audio signal.

Schuijers et al. disclose a parametric coding technique comprising:

estimating (TSA) a position of a transient signal component in the audio signal (section 2.1, starting position of a transient is identified);

matching a shape function having shape parameters and a position parameter to said transient signal (section 2.1, envelope parameters describing the shape of the transient are identified); and

including (15) the position and shape parameters describing the shape function in said audio stream (AS) (section 2.1, the parameters above are coded and included in a coded audio stream, see also section 2).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Lindmann et al. to estimate a transient position and shape parameters and include them in the audio stream, because, as suggested by Schuijers et al., modeling transients using quasi-stationary patterns (i.e. by using only sinusoid or noise models) is an inefficient approach (see section 2).

Allowable Subject Matter

9. Claims 4, 9, 12, 15, and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 4, AAPA is most pertinent to the subject matter (see Fig. 2a). However, AAPA, as well as Lindmann et al., Kroon et al., and Schuijers et al., do not disclose or suggest estimating a difference between the pulse train and the second residual signal and generating an indicator of the difference in the audio stream.

Regarding claim 9, AAPA is most pertinent to the subject matter (see Fig. 2a). However, AAPA, as well as Lindmann et al., Kroon et al., and Schuijers et al., do not disclose or suggest the sinusoid components are limited by a first bit budget, the pulse train parameters are limited by a second bit rate budget, and the sum of the first bit rate budget and second bit rate budget is selected from a range according to a required quality of encoding.

Regarding claim 12, AAPA is most pertinent to the subject matter (see Fig. 2b). However, AAPA, as well as Lindmann et al., Kroon et al., and Schuijers et al., do not disclose or suggest adding a white noise signal to the excitation signal generated from the pulse train parameters to provide a second signal.

Regarding claim 15, AAPA is most pertinent to the subject matter (see Fig. 2b). However, AAPA, as well as Lindmann et al., Kroon et al., and Schuijers et al., do not disclose or suggest imposing a time domain envelope according to second filter parameters on the excitation signals generated from the pulse train parameters.

Regarding claim 16, AAPA is most pertinent to the subject matter (see Fig. 2b). However, AAPA, as well as Lindmann et al., Kroon et al., and Schuijers et al., do not disclose or suggest mixing a temporally filtered white noise signal with the excitation signal generated from the pulse train parameters to provide a second signal.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Akamine et al. (U.S. Patent RE 36,721) disclose a pulse train type coder. Adut (U.S. Patent Application Publication 2004/0024597) discloses a regular-pulse excitation (RPE) type coder. Jarvinen (U.S. Patent 5,742,733) discloses a parametric speech coder. Ooomen et al. (U.S. Patent Application Publication 2001/0032087) disclose a parametric coder with transient detection. Gersho et al. (U.S. Patent 6,233,550) disclose a parametric coder that applies temporal envelope processing. den Brinker et al. (*Parametric Coding for High Quality Audio*) disclose an additional parametric coding scheme.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRIAN L. ALBERTALLI whose telephone number is

(571)272-7616. The examiner can normally be reached on Monday-Thursday, 8 AM to 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on (571) 272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BLA 6/11/09
/Brian L Albertalli/
Examiner, Art Unit 2626